

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/624,619	DUVICK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Medina A. Ibrahim	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the telephone interview of 04/15/05.
2.  The allowed claim(s) is/are 7-9, renumbered as 1-3, respectively.
3.  The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lila Akrad on 04/15/05.

The application has been amended as follows:

In The Abstract:

The abstract has been replaced as following:

-----The present invention provides transformed plants comprising a polynucleotide encoding amino polyol amine oxidase (APAO) from *Exophiala spinifera* and a method of expressing APAO in transgenic plants and seeds. In this way, transgenic plants can be produced having fumonisin degrading capability, as well as with the capability of producing the degrading enzyme. -----

In The Specification:

The continuing data on page 1, second paragraph, of the specification has been replaced with the following:

----This application is a continuation of US application 09/352, 168, filed 07/12/1999, now US PAT 6,211,435, which claims benefit to 60/092, 936, filed 07/17/1998, all of which are hereby incorporated by reference. ----

At pages 3 and 63 of the specification, lines 15 and 24, ----now US PAT 6,229,071 and 6,025,188, respectively, --- has been inserted after "1997".

In The Claims:

At claims 7 and 8, "fumonisin degrading" before "activity" has been replaced with ---amine oxidase---.

Claim 9 (Currently amended). A method of reducing pathogenicity of a fumonisin producing fungus to a plant [or structurally related mycotoxin], comprising:

a) transforming a plant cell with a vector comprising a polynucleotide operably linked to a promoter, wherein the polynucleotide has at least 95% sequence identity to a

polynucleotide selected from the group consisting of [:] SEQ ID NO: 5 and SEQ ID NO: 10, wherein the polynucleotide encodes a polypeptide having amine oxidase [fumonisin degrading] activity;

b) growing the plant cell under plant growing conditions; and

c) regenerating a transformed plant from said plant cell [inducing expression of said polynucleotide for a time sufficient for amounts of a fumonisin esterase and APAO enzymes to accumulate to levels that can inhibit the fungus] , whereby the pathogenicity of said fungus to said transformed plant is reduced as compared to the pathogenicity of said fungus to a non-transformed plant.

**REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: SEQ ID NO: 5 and 10 are partial nucleotide sequences encoding partial proteins. However, working

examples (Examples 8-12) on pages 53-59 show that these nucleotide sequences encode functional amino polyol amine oxidase (APAO) enzymes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (571) 272-0797. The Examiner can normally be reached Monday -Thursday from 8:00AM to 5:30PM and every other Friday from 9:00AM to 5:00 PM. Before and after final responses should be directed to fax nos. (703) 872-9306 and (703) 872-9307, respectively.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Dr. Amy Nelson, can be reached at (571) 272-0804.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/15/05  
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